

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

**NATIONAL WEATHER SERVICE
Nashville Weather Forecast Office
500 Weather Station Road
Old Hickory, Tennessee 37138**

Original Date of Plan : April 1994
Date of Last Plan Review : April 14, 2003
**Date of Last Amendment
and P.E. Certification** : April 14, 2003

Designated Person Responsible for Spill Prevention:

Ralph Troutman, Environmental Focal Point
Telephone: (615) 754-4634

CERTIFICATION

I hereby certify that I or my designated agent have examined the facility, and being familiar with the provisions of Title 40 of the Code of Federal Regulations Part 112, I attest that this Spill Prevention, Control, and Countermeasures (SPCC) Plan has been prepared in accordance with good engineering practices including the consideration of applicable industry standards.

John McCall

Printed Name of Registered Engineer

Signature of Registered Engineer and Date

Registration No. **PE-050653-E** State **PA**

REVIEW DOCUMENTATION AND MANAGEMENT APPROVAL PAGE

REVIEW DOCUMENTATION

In accordance with Title 40 Code of Federal Regulations (CFR) Part 112.5(b), a review and evaluation of this Spill Prevention, Control, and Countermeasures (SPCC) Plan shall be conducted at least once every 5 years. This evaluation shall be conducted by the Meteorologist in Charge, National Weather Service (NWS) Regional Environmental/ Safety Coordinator, or National Oceanic and Atmospheric Administration (NOAA) Regional Environmental Compliance Officer.

If a change in the facility design, construction, operation, or maintenance has materially affected the potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines, an amendment shall be fully implemented as soon as possible, but no later than six months after such a change occurs, and shall be certified by a Professional Engineer. In this case, the National Weather Service shall amend the plan to include more effective prevention and control technology if:

- Such technology will significantly reduce the likelihood of a spill event, and
- If such technology has been field-proven at the time of review.

When a change at the facility has not affected the potential for discharge (such as a change in personnel or contact information), the amendment can be made any time, and certification by a Professional Engineer shall not be required.

Review Date	Printed Name of Responsible Manager	Signature of Responsible Manager	SPCC Plan Amended?	PE Certif. Required?

MANAGEMENT APPROVAL

The National Weather Service is committed to the prevention of discharges of oil to navigable waters and the environment. We maintain the highest standards for spill prevention, control, and countermeasures through regular review, updating, and implementation of this SPCC Plan for the Weather Forecast Office. I hereby certify that the necessary resources to implement this SPCC Plan have been committed.

Derrel Martin, Meteorologist in Charge

Printed Name and Title of Responsible Manager

Signature and Date

CONTENTS

<u>Section</u>	<u>Page</u>
Certification	i
Review Documentation and Management Approval	ii
PART I - GENERAL INFORMATION	1
A. GENERAL	1
1. Name	1
2. Type	1
3. Date of Initial Operation	1
4. Location	1
5. Name and Address of Operator	1
6. Facility Contacts	1
B. SITE DESCRIPTION AND OPERATIONS	1
1. Facility Location, Layout, and Operations	1
2. Facility Storage	2
3. Drainage Pathway and Distance to Navigable Waters	2
4. Spill History	3
5. Spill Potential, Volumes, and Rates	3
PART II - DESIGN COMPONENTS AND OPERATIONAL PROCEDURES FOR SPILL PREVENTION AND CONTROL	4
A. SPILL PREVENTION	4
1. Bulk Storage Tanks and Facility Transfer Operations	4
2. Tank Truck Unloading Operations	4
3. Inspections And Records	5
4. Site Security	6
5. Training	7
B. SPILL CONTROL	7
1. Secondary Containment Designs, Construction Material, and Volume	7
2. Spill Kits Type and Location	7
PART III - SPILL COUNTERMEASURES AND REPORTING	9
A. SPILL COUNTERMEASURES	9
B. SPILL REPORTING	10
1. General Notification Procedures for All Spills	10
2. Federal Notification	10
3. State Notification	11
4. Cleanup Contractor Notification	12

PART IV - RECOMMENDED IMPROVEMENTS	13
A. PHYSICAL UPGRADES	13
1. Signage/Postings	13
B. PROCEDURAL CHANGES	13
1. Inspections and Preventative Maintenance	13
2. Tank Integrity Testing	13
3. Training	13

Appendix

A	TANK RECORDS
B	TANK ULLAGE/FUELING LOG AND FUEL UNLOADING PROCEDURE CHECKLIST
C	INSPECTION CHECKLISTS
D	TRAINING OUTLINE AND TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, PARTS 112.1-112.20-OIL POLLUTION PREVENTION
E	SPILL REPORTING FORM
F	CROSS REFERENCE OF THE REQUIREMENTS OF TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, PARTS 112.7 AND 112.8, WITH THIS PLAN

FIGURES

<u>Figure</u>	<u>Page</u>
1	SITE LOCATION
2	SITE LAYOUT

TABLES

<u>Table</u>	<u>Page</u>
1	DESCRIPTIVE INVENTORY OF FACILITY STORAGE
2	POTENTIAL SPILL SOURCES AND VOLUMES

PART I - GENERAL INFORMATION

A. GENERAL

This section provides general information about the facility.

1. Name

National Weather Service (NWS)
Nashville Weather Forecast Office (WFO)

2. Type

This facility is an onshore facility (non-production) that operates as a river and weather forecast center and is staffed 24 hours per day, 7 days per week, and 365 days per year.

3. Date of Initial Operation

1994

4. Location

500 Weather Station Road
Old Hickory, Wilson County, Tennessee 37138

5. Name and Address of Operator

National Weather Service
500 Weather Station Road
Nashville, Tennessee 37138

6. Facility Contacts

<u>Name</u>	<u>Title</u>	<u>Telephone Number</u>
Ralph Troutman	Environmental Focal Point	(615) 754-4634
Derrel Martin	Meteorologist in Charge	(615) 754-4633

B. SITE DESCRIPTION AND OPERATIONS

This section describes the site location, its operations that store diesel fuel, site drainage patterns, spill history, and spill potential.

1. Facility Location, Layout, and Operations

The facility is located in Old Hickory, Wilson County, Tennessee, approximately 8 miles east of the city of Nashville, Tennessee (Figure 1). Figure 2 shows the layout of the facility, including the location of a 1,000-gallon aboveground storage tank (AST), a 25-gallon day tank, and two 250-gallon Radar Data Acquisition (RDA) tanks.

The 1,000-gallon AST and 25-gallon day tank store fuel that is used to power a 175-kilowatt (kW) emergency WFO generator. The WFO generator is used to supply backup electricity for WFO building operations. The day tank and 175-kW generator are located in the WFO generator building that is adjacent to the WFO building. The generator and day tank are not exposed to precipitation. The 1,000-gallon AST is located east of the WFO building outside the generator room.

The two 250-gallon RDA tanks store fuel that is used to power the facility's RDA emergency generator. The RDA emergency generator supplies backup electricity to the RDA tower and equipment located approximately 100 feet east of the WFO generator building. The RDA tanks and RDA generator are located in the RDA generator building and are not exposed to precipitation.

The estimated fuel usage is approximately 30 to 40 gallons per month. Fuel is typically used from running an automatic test of the generators once per week for 30 minutes. Fuel consumption would increase depending on the frequency and duration of any power outages.

2. Facility Storage

The 1,000-gallon AST is a welded steel plate tank enclosed inside a concrete outer shell that provides sufficiently impervious containment and protects the AST and the secondary containment area from exposure to precipitation. The 1,000-gallon AST has a 2-inch-diameter vent and a 6-inch-diameter emergency vent. The 1,000-gallon AST is connected to a pump on top of the 25-gallon day tank via a double-walled line that travels through the wall of the WFO generator building. This pump moves fuel from the 1,000-gallon AST into the day tank on demand as the generator is engaged. The 25-gallon day tank is a single-walled rectangular steel tank that is equipped with an overflow basin. The day tank is connected to the generator by rubber supply and return lines.

The two 250-gallon RDA tanks are rectangular, single-walled welded steel plates. Fuel for the RDA generator is fed directly from the RDA tanks via rubber supply lines.

Table 1 summarizes the pertinent information on the tanks at the facility. A copy of all tank registrations and other tank records, such as notifications to the Local Emergency Planning Committee or tank testing documentation, is included in Appendix A.

3. Drainage Pathway and Distance to Navigable Waters

Drainage in the area of the 1,000-gallon AST or RDA tanks travels north and west across grassy surfaces to a steep vegetated slope and swales that lead to Langford Cove approximately 0.25 mile from the site. Langford Cove is part of the Cumberland River.

4. Spill History

Reportable spill events from April 1994 to present (date on cover of this plan)

None.

5. Spill Potential, Volumes, and Rates

The potential causes of spills from the tanks are from overfilling, a ruptured hose during fuel unloading, failure of the fuel supply line to the generator or day tank, vehicle collision, structural failure, vandalism, or a natural disaster. For the day tank, additional causes could include failure of the day tank pump to shut down or failure of the line from the pump to the day tank.

Operational procedures are in place to prevent overfilling during fuel unloading, and countermeasures can be used to prevent spills that may occur during unloading from reaching the nearest water body. Failure of supply lines or pumps can be minimized through routine inspections. Spills caused by vehicle collision or vandalism can easily be prevented because none of the tanks are in the direct line of traffic. Further, the 1,000 gallon AST further protected by concrete guard posts, and the two RDA tanks and day tank are located within locked buildings. Vandalism is generally deterred because the facility is manned 24 hours per day. Also, the two RDA tanks are located inside a building that is designed to contain spills and the day tank is located inside the WFO generator building that likely would contain a spill. Finally, spills caused by a natural disaster are low probability events and impractical to defend against beyond the spill prevention, control, and countermeasures currently in place.

Table 2 summarizes the potential type of failure, potential spill volume, estimated rate, and direction of spill flow from the tanks.

PART II - DESIGN COMPONENTS AND OPERATIONAL PROCEDURES FOR SPILL PREVENTION AND CONTROL

This section discusses spill prevention and control measures that shall be implemented at the facility.

A. SPILL PREVENTION

This section describes design components and operating procedures that shall be implemented at the facility to prevent oil spills.

1. Bulk Storage Tanks and Facility Transfer Operations

1,000-gallon AST: The tank construction is compatible with the number 2 diesel fuel stored in the tank. A concrete outer shell completely encloses the AST and provides sufficient secondary containment. A float-type level gauge indicates the fuel level (from empty to full) in the AST. A 5-gallon-capacity square spill container surrounds the fill spout and contains a 2-inch emergency return line to the AST. The AST is equipped with an audible high-level alarm (API/RODAN) set at 85 percent of the tank capacity (850 gallons) and an automatic shut-off valve on the cam-lock fitting fill spout set to close at 90 percent of the tank capacity (900 gallons). An interstitial monitoring device between the primary steel tank and concrete outer shell (secondary containment) is connected to the audible alarm system.

Day Tank: The day tank is located within the WFO generator building and is not exposed to precipitation. The day tank is equipped with a liquid level gauge to indicate the amount of fuel in the tank (from empty to full). Also, the day tank is equipped with an overflow basin. The overflow basin is equipped with a float switch that sounds an audible alarm if fuel is detected. If fuel reaches a certain level in the overflow basin, the switch will shut off the pump that directs fuel to the day tank.

Piping: An antisiphoning valve is located between the 1,000-gallon AST and the pump to prevent unwanted fuel from being siphoned from the AST. The aboveground piping from the AST to the day tank pump is in a polyvinyl chloride pipe sleeve to protect it from corrosion.

RDA Tanks: These tanks are located inside the RDA generator building that is designed to provide sufficient containment for potential spills from the tanks. The RDA tanks are compatible with the number 2 diesel fuel stored within the tanks.

2. Tank Truck Unloading Operations

All delivery drivers shall have U.S. Department of Transportation hazardous material transportation training as required by Federal law.

The remainder of this section discusses the procedures that shall be used during unloading of fuel from the tank truck into the tanks to prevent spills. This procedure shall be documented every time refueling occurs on the form found in Appendix B. Copies of this form shall be kept for 5 years.

The following procedure shall be used prior to fuel unloading:

- Move spill containment equipment, such as booms or spill barriers, into the unloading area.
- Ensure that the audible high-level alarm system and the automatic shutoff valve are functioning properly.
- Determine the available capacity (ullage) of the tank by converting the reading on the fuel gauge to gallons (see Appendix B). This ullage is communicated to the fuel supply contractor and marked in the fueling log.
- Block the tank truck wheels.
- Place drip pans under all pump hose fittings (if applicable) prior to unloading.
- Ensure the fill nozzle is placed in the appropriate tank appurtenance.

Both the NWS representative and the delivery driver shall remain with the vehicle at all times during unloading. Gauges on the tank and the truck shall be continuously monitored to ensure the ullage is not exceeded. If an audible high-level alarm sounds, the unloading of fuel shall be stopped as soon as possible.

After fuel unloading is completed:

- Record the amount of fuel transferred to the tank in the log (Appendix B).
- Drain the fill hose and then ensure that all drain valves are closed (if applicable) prior to removal of the hose from the tank.
- Pour any fuel in the drip pans, tank truck containment pool, or spill container on the fill pipe into the storage tank (if it has the capacity), or dispose of appropriately.
- Inspect the tank truck prior to removing the blocks to ensure the lines have been disconnected from the tank.
- Remove the blocks from the truck wheels. Prior to departure, closely inspect the lowermost drain and all outlets of the delivery truck and ensure they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.
- Place a copy of the fuel unloading checklist in the SPCC plan.

3. Inspections And Records

Inspection and Maintenance of Tanks: The 1,000-gallon AST, day tank, and RDA tanks shall be inspected weekly for any oil outside the tanks, especially at seams (including the underside). The concrete outer shell of the 1,000-gallon AST shall be inspected for excess cracks. The outside of exposed piping shall be inspected weekly, especially at the joints such as gasket fittings. Monthly and annual inspections shall follow the checklists shown in Appendix C.

Integrity Testing of Tanks: Visual integrity testing as described above as well as interstitial monitoring (for double-walled tanks) shall be used to monitor the structural integrity of all tanks. This protocol provides environmental protection equivalent to that which would be provided by other types of non-destructive integrity testing because of the following.

- The 1,000-gallon AST is a shop-built, single-walled steel tank equipped with a concrete outer shell for secondary containment. An interstitial monitoring device between the steel tank and concrete outer shell continuously monitors the secondary containment for any leaks from the primary steel tank. Also, routine (weekly, monthly, and annual) visual inspections would detect any tank integrity issues because all sides of the tank are visible.
- The day tank is a shop-built, single-walled steel tank equipped with an overflow basin for secondary containment. A monitoring device in the overflow would sound an audible alarm and shut off the pump to the day tank if fuel were detected. Also, routine (weekly, monthly, and annual) visual inspections would detect any tank integrity issues because all sides of the tank are visible.
- The RDA tanks are shop-built, single walled tanks stored in a building constructed with “tub flooring” that provides secondary containment. Routine (weekly, monthly, and annual) visual inspections would detect any leaks from the tank since the tank is visible on its top and sides. Also, the outsides of the tank bottoms are partially visible and any leak from beneath the tank would be detected within the secondary containment (on the “tub flooring”).
- Facility personnel are regularly trained in pollution prevention practices and tank inspection requirements as set forth in this plan (Part III, Section 5 and Part IV, Recommended Improvements).

Should any visual inspection indicate a problem with tank integrity (e.g., corrosion, cracking, leaking), the facility shall preferably replace the tank rather than conducting material repairs. If the facility instead chooses to conduct repairs, non-destructive integrity testing shall be conducted to verify that the repairs were completed properly.

Record Keeping: The Environmental Focal Point or a designated alternate is responsible for completing the ullage logs and documenting the fuel unloading procedures. These records, as well as records of all inspections, shall be maintained for at least 5 years from the time of inspection.

4. Site Security

Adequate lighting is provided for all tanks such that spills can be detected and vandalism deterred and there is electronic surveillance on the premises. Both the WFO and RDA generator buildings are kept locked. Signage around the WFO 1,000-gallon AST warns of the presence of a combustible liquid, that the combustible liquid is diesel fuel, and that smoking is not permitted near the tanks. A fire extinguisher is located in the adjacent generator enclosures. None of the tanks are located in the direct line of parking lot traffic. A security fence surrounds the entire NWS property.

5. Training

The Environmental Focal Point (person responsible for spill prevention at the facility), at least one alternate, and the Meteorologist in Charge shall be trained in the intent of applicable oil spill regulations and how to implement the inspection and maintenance procedures outlined above. Spill control and countermeasures also shall be included in the training. The alternate shall be designated in case the primary person is off the site at the time of a spill. A recommended outline for the training is found in Appendix D.

Training shall be repeated at least once per year. All new personnel responsible for implementing the SPCC plan shall be properly trained before beginning the new position. A record of who was trained, when, and by whom, shall be filed with this SPCC plan and retained for at least 5 years.

Spill prevention briefings for operating personnel should be conducted at least once per year to ensure adequate understanding of the SPCC plan and to describe known spill events or failures, malfunctioning components, and recently developed precautionary measures. These briefings can be conducted concurrent with the training sessions described above.

B. SPILL CONTROL

This section describes control measures that shall be implemented to prevent any spilled oil from entering navigable waters or adjoining shorelines.

1. Secondary Containment Designs, Construction Material, and Volume

The concrete secondary containment tank around the 1,000-gallon AST completely encloses the AST and does not allow precipitation into the containment. The system is equipped with a monitoring system that can detect fuel in the interstitial space of the primary tank and concrete outer shell and can detect fuel of 1 inch or more in the interstitial space of the storage tank. A 5-gallon square spill container surrounds the fill spout and contains a 2-inch emergency return line to the AST.

The generator day tank is located inside the WFO building generator room that does not allow precipitation into the area and likely would provide adequate containment in the event of a spill. Also, the day tank is equipped with an overflow basin. The overflow basin is equipped with a float switch that sounds an audible alarm if fuel is detected. If fuel reaches a certain level in the overflow basin, the float switch will shut off the pump.

Secondary containment for the two RDA tanks is provided for in the RDA generator building design. Adequate containment volume is provided in the building in the case of an instantaneous release. The RDA generator building is designed with a "tub flooring" with a raised door frame to prevent spills from flowing from the building.

2. Spill Kits Type and Location

The facility shall have kits designed to absorb diesel fuel and which can prevent discharged oil from reaching nearby water bodies or storm sewers. The WFO generator building currently has one kit that include oil absorbent socks, pads, and booms in a 85-gallon polyethylene container that can be used as a disposal containers. The RDA generator building includes a similar spill kit with a 30-gallon container.

PART III - SPILL COUNTERMEASURES AND REPORTING

The primary emphasis of this SPCC plan is on prevention. The spill countermeasures presented do not constitute a contingency plan detailed in Title 40 CFR Part 109, nor is one required. Such a plan is only required under Title 40 CFR 112.7(d) if it is impracticable to provide containment, diversionary structures, or equipment to prevent the discharge of oil to navigable waters. In addition, this facility is not required to have a facility response plan under Title 40 CFR Part 112.20 because it does not:

- Transfer oil over water from vessels and have a total oil storage capacity of greater than or equal to 42,000 gallons, or
- Have a total storage capacity over 1 million gallons.

A. SPILL COUNTERMEASURES

This section presents countermeasures to contain, clean up, and mitigate the effects of an oil spill that impacts navigable waters or adjacent shorelines.

A spill containment and cleanup activity will never take precedence over the safety of personnel. No countermeasure activities will be undertaken until conditions are safe for workers. The “SWIMS” procedures should be implemented as countermeasures:

S - Stop the leak and eliminate ignition sources.

- a. Attempt to seal or some how stop leak if it can be done safely.
- b. Attempt to divert flow away from catch basins with a spill barrier or the contents of the spill kit.
- c. Eliminate all ignition sources in the immediate area.

W - Warn others.

- a. Yell out “SPILL.” Inform the person in-charge at your facility.
- b. Account for all personnel and ensure their safety.
- c. Notify contacts and emergency response contractor as described in the following section for assistance in control and cleanup.

I - Isolate the area.

- a. Rope off the area.

M - Minimize your exposure. Stay upwind.

S - Stand by to assist the emergency response contractor, if necessary.

B. SPILL REPORTING

This section discusses the reporting procedures for spills of diesel fuel at the facility. The individuals and organizations that are notified vary based on the quantity of the spill, whether it reaches navigable waters or adjoining shorelines, and the frequency of spills.

A spill report form that requests the information to be reported to all agencies in written form (to the extent known) is included in Appendix E. Copies of the completed form should be submitted, preferably by e-mail, to the NWS and NOAA representatives listed below.

1. General Notification Procedures for All Spills

The responsible person or designee is directly charged with reporting all oil spills that result from facility operations as follows:

- First, call 9-1-1 if there is an immediate emergency (if “9” is required for connection to an outside line, then call 9-9-1-1)
- Next, notify the appropriate individuals within the NWS such that the individuals can keep internal records regarding the spill event. If necessary, the individuals can provide technical assistance regarding the procurement of cleanup contractors, the potential need for follow-up assessments, regulatory reporting, waste disposal, or other issues.

1. **Mike Jacob, (301) 713-1838 Ext. 165, JMichael.Jacob@noaa.gov,**
NWS Environmental Compliance Officer
2. **Olga Kebis, (301) 713-1838 Ext. 173, Olga.Kebis@noaa.gov,**
NWS Safety Officer
3. **Terry Brisbin, (817) 978-7777, Ext. 139, Terry.Brisbin@noaa.gov,**
NWS Southern Regional Environmental/Safety Coordinator
4. **Mark George, (303) 497-3064, Ext. 263, Mark.George@noaa.gov,**
NOAA Mountain Regional Environmental Compliance Officer

2. Federal Notification

The Federal Clean Water Act as described in Title 40 CFR Part 110.6, requires notifying the U.S. Environmental Protection Agency’s (EPA) National Response Center (or the U.S. Coast Guard [USCG]) as soon as anyone has knowledge of any discharges of oil in quantities that “may be harmful.” Title 40 CFR Part 110.3 defines “may be harmful” as a discharge that:

- Violates applicable water quality standards, or
- Causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

If either of these criterion are met contact:

- The National Response Center (EPA and USCG): **(800) 424-8802**

Under the SPCC regulations, spill information listed in Title 40 CFR Part 112.4(a) must be reported to the EPA Regional Administrator within 60 days if either of the following occurs:

- A discharge of more than 1,000 gallons of oil into or upon navigable waters or adjoining shorelines in a single event, or
- A discharge of more than 42 gallons of oil during each of two spill events within any 12-month period.

If one of the above has occurred, the information to be reported to the EPA Regional Administrator shall include the following items by submitting a copy of this SPCC Plan and a completed copy of the spill report form in Appendix E.

- Facility name
- Name of the person reporting the incident
- Facility location
- Maximum storage or handling capacity of the facility
- Corrective action and countermeasures taken including a description of equipment repairs and replacements
- Adequate description of the facility including maps, flow diagrams, and topographical maps, as necessary
- Cause of the discharge
- Additional preventive measures taken or contemplated to minimize recurrence
- Other information that the Regional Administrator may deem pertinent

Diesel fuel is not listed as a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); therefore, no other notification to the EPA is required for discharges of diesel fuel other than those listed above.

3. State Notification

To satisfy the state reporting requirements, the location and quantity of any spill must be determined. The Tennessee Department of Conservation and Environment (TDEC) states that the reportable quantity (RQ) for the discharge of oil into or upon navigable waters is an amount that causes a visible film or sheen upon the surface of the water. The RQ for the release of oil into the environment, excluding navigable waters, is an amount of 25 gallons or more.

TDEC also states that any person who, without regard to intent or negligence, causes or permits any oil to be discharged in or on the marine waters of the state shall immediately contain, cleanup, and remove the oil in the most effective manner which minimizes environmental damage and in accordance with the applicable contingency plans, unless ordered otherwise by the Coast Guard or the administrator.

TDEC requires verbal notification to the local fire department and the TDEC Environmental Assistance Center emergency response hotline within 24 hours of knowledge of the release, unless notification within that time frame is impractical because of unforeseen circumstances. If the above criteria are met, the TDEC Spill Notification Hotline shall be notified at the following number:

TDEC Spill Hotline (24 hours): **(888) 891-8332**

4. Cleanup Contractor Notification

An emergency response contractor should be notified to assist with the clean up, if necessary. Contact information for at least three contractors shall be maintained in this plan. NWS has identified the following contractors that are available for an emergency response:

- First Response: **(615) 868-9110**
- Philip Environmental Services: **(800) 567-7455**
- Safety Kleen: **(615) 333-1496**

PART IV - RECOMMENDED IMPROVEMENTS

In accordance with Title 40 CFR Section 112.7, this section presents physical upgrades or procedural changes that are not yet fully operational but are called for in the plan.

A. PHYSICAL UPGRADES

1. Signage/Postings

Signage around the two RDA tanks should warn of the presence of a combustible liquid, that the combustible liquid is diesel fuel number 2, and that smoking is not permitted near the tanks.

B. PROCEDURAL CHANGES

1. Inspections and Preventative Maintenance

The inspection checklists found in Appendix C should be followed. This requirement is found in Title 40 CFR Part 112.7(e). The area within and around all tanks shall be inspected for signs of leaks regularly. Visual inspections of the outside of the storage tanks and the walls of the tanks should serve to signal a potential problem with their integrity. Should any visual inspection indicate a tank is leaking or has otherwise failed and the facility instead chooses to conduct repairs, non-destructive integrity testing shall be conducted to verify that the repairs were completed properly.

2. Tank Integrity Testing

As discussed in Part II.A.3 of this plan, visual integrity testing shall be used to monitor the structural integrity of all tanks. The inspection checklists found in Appendix C should be followed. This requirement is found in Title 40 CFR Part 112.8(c)(6). Should any visual inspection indicate a tank is leaking or has otherwise failed, the facility shall preferably replace the tank rather than conducting material repairs. If the facility instead chooses to conduct repairs, non-destructive integrity testing shall be conducted to verify that the repairs were completed properly.

3. Training

The Environmental Focal Point (person responsible for spill prevention at the facility), at least one alternate, and the Meteorologist in Charge should be trained in the intent of the applicable oil spill regulations and how to implement the inspection and maintenance procedures outlined in the previous section. Spill control and countermeasures also should be included in the training. The alternate should be designated in case the primary person is off the site at the time of a spill. A recommended outline for the training is found in Appendix D.

Training should be repeated at least once per year. All new personnel responsible for implementing the SPCC plan should be properly trained before beginning the new position. A record of who was trained, when, and by whom, should be filed with this SPCC plan and kept for a period of 5 years. This requirement is found in Title 40 CFR 112.7(f).

Spill prevention briefings for operating personnel should be conducted at least once per year to ensure adequate understanding of the SPCC plan and to describe known spill events or failures,

malfunctioning components, and recently developed precautionary measures. These briefings can be conducted concurrent with training sessions described above.

Figure 1 Site Location

Figure 2 Site Layout

TABLE 1
DESCRIPTIVE INVENTORY OF FACILITY STORAGE

Tank	Nominal Capacity (Gallons)	Product Stored	Type	Double Walled?
1,000-gallon AST	1,000	Diesel fuel number 2	AST	Yes
Day Tank	25	Diesel fuel number 2	AST	Yes ¹
RDA Tank	250	Diesel fuel number 2	AST	Yes ²
RDA Tank	250	Diesel fuel number 2	AST	Yes ²
Total Capacity	1,525			

Notes: AST Aboveground storage tank

1 Tank is located inside building likely capable of containing a spill from the tank.

2 RDA tanks are in a storage building capable of containing the entire volume of the tank.

TABLE 2
POTENTIAL SPILL SOURCES AND VOLUMES

Source	Event	Potential Spill Volume (gallons)	Estimated Rate (gallons per minute)	Direction of Spill Flow	Remarks
1,000-gallon AST	Overfilling or a ruptured hose during fueling	>0 to 40 ^a	80 ^b	East	Operational procedures are in place to prevent overfilling and spill kit materials can be used to prevent spills from reaching a nearby water body.
	Failure of fuel supply line to pump	>0 to 1,000	Variable	North	Can be minimized through routine inspections.
	Structural failure or vandalism	>0 to 1,000	Variable	North	Low probability event that primary and secondary tank shells would fail. Facility is manned 24 hours per day.
	Vehicle collision	>0 to 1,000	Variable	North	Tank is not located in the direct line of traffic. Guard posts are present.
	Overturn or puncture during a natural disaster	>0 to 1,000	Variable	North	Low probability event. Double-walled tank gives extra protection from rupture, but a natural disaster could cause a spill.
Generator Day Tank	Failure of the pump to shut down after filling day tank or failure of the line from pump to day tank.	>0 to 1,000	Variable	North	Can be minimized through routine inspections. Tank is located within building likely to contain spills or provide sufficient response time to divert a spill from reaching a water body.
	Failure of fuel return line	>0	10 ^c	North	Can be minimized through routine inspections.
	Structural failure or vandalism	>0 to 25	Variable	North	Low probability event can be minimized through regular inspections and maintenance. Tank is located within building that likely would contain spills. Facility is manned 24 hours per day.
	Overturn or puncture during a natural disaster	>0 to 25	Variable	North	Low probability event.

Notes:

- a Based on a maximum pumping rate of 80 gallons per minute from the fill truck and a maximum of 30 seconds to turn off the pump.
- b Approximate maximum pumping rate of fill truck.
- c Estimated return line flow rate.

TABLE 2**POTENTIAL SPILL SOURCES AND VOLUMES (continued)**

Source	Event	Potential Spill Volume (gallons)	Estimated Rate (gallons per minute)	Direction of Spill Flow	Remarks
Each of Two RDA Tanks	Overfilling or a ruptured hose during fueling	>0 to 40 ^a	80 ^b	North	Operational procedures are in place to prevent overfilling and spill kit materials can be used to prevent spills from reaching a nearby water body.
	Failure of fuel supply line to pump	>0 to 250	Variable	North	Can be minimized through routine inspections. Tanks and supply lines are within a building designed to contain spills.
	Structural failure or vandalism	>0 to 250	Variable	North	Low probability event that both primary and secondary tank shells would fail. Tanks and supply lines are within a locked building designed to contain spills and facility is manned 24 hours per day.
	Overturn or puncture during a natural disaster	>0 to 250	Variable	North	Low probability event.

Notes:

- a Based on a maximum pumping rate of 80 gallons per minute from the fill truck and a maximum of 30 seconds to turn off the pump.
- b Approximate maximum pumping rate of fill truck.
- c Estimated return line flow rate.

APPENDIX A
TANK RECORDS

APPENDIX B

**TANK ULLAGE/FUELING LOG AND
FUEL UNLOADING PROCEDURE CHECKLIST
(2 Pages)**

TANK ULLAGE AND FUELING LOG

[illegible]

a From gauge reading
b Available capacity = tank capacity - initial volume of fuel in tank

APPENDIX B-2

FUEL UNLOADING PROCEDURE CHECKLIST

Date: _____

Tank: _____

NWS Representative: _____

Supplier: _____

✓	ITEM	DESCRIPTION	COMMENT
The following six items must be completed <u>prior</u> to fuel unloading:			
	1	Move spill containment equipment, such as booms or spill barriers, into the unloading area.	
	2	Ensure the audible high-level alarm system and automatic shutoff valve are functioning properly.	
	3	Determine the available capacity (ullage) of the tank by converting the reading on the fuel gauge to gallons (see Appendix B, page B-1 in SPCC plan). This ullage should then be marked in the fueling log and communicated to the tank truck unloading contractor.	
	4	Block the wheels of the tank truck.	
	5	Place drip pans under all pump hose fittings (if applicable) after the hose is hooked up to the tank and prior to unloading.	
	6	Ensure the fill nozzle is placed in the appropriate tank appurtenance.	
During unloading			
	7	Ensure that the NWS representative and the tank truck operator remain with the vehicle at all times during unloading.	
	8	Monitor the gauges on the tank and the truck continuously to ensure the ullage is not exceeded. If the audible high-level alarm sounds, the unloading of fuel is stopped as soon as possible.	
After fuel unloading is completed			
	9	Record the amount of fuel unloaded in the log (Appendix B, page B-1).	
	10	Prior to removing the fill hose from the tank, ensure that it is drained and that all drain valves are closed (if applicable).	
	11	Any fuel accumulated in the drip pans or spill container on the fill pipe should be poured into the tank (if it has the capacity) or disposed of appropriately (describe how it was disposed of, if applicable).	
	12	Inspect the tank truck prior to removing the blocks to ensure the lines have been disconnected from the tank.	
	13	Remove the blocks from tank truck wheels. Prior to departure, closely inspect the lowermost drain and all outlets of the delivery truck and ensure they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.	
	14	Place a copy of this fuel-unloading checklist in the SPCC plan.	

APPENDIX C
INSPECTION CHECKLISTS
(2 Pages)

MONTHLY INSPECTION CHECKLIST			
Date of Inspection:	Tank Name or No.:		
Date of Last Inspection:	Inspected by:	Signature:	
A. TANKS	YES	NO	NOTES
1. Are tanks marked properly?			
2. Is area atop and around tank and within secondary containment free of combustible materials, debris, and stains?			
3. Is there any oil on the ground, concrete, or asphalt around the tank?			
4. Are there any visible cracks or indications of corrosion on the tank, at fittings, joints, or seals (such as paint peeling or rust spots)?			
5. Are there any raised spots, dents, or cracks on the tank?			
6. Does it appear that the foundation has shifted or settled?			
7. Is the fuel gauge working properly?			
8. Are all vents clear so they may properly operate?			
9. If rainwater is present within containment, does capacity remain for spill control (if applicable)?			
B. PIPING			
1. Is there any oil on the outside of or under any aboveground piping, hoses, fittings, or valves?			
2. Are aboveground piping, hoses, fittings, or valves in good working condition?			
C. SECURITY/SAFETY/SPILL COUNTERMEASURES			
1. Are lights working properly to detect a spill at night?			
2. Are all locks in the "lock" position?			
3. Are all warning signs properly posted and readable?			
4. Are vehicle guard posts in place and properly secured (if applicable)?			
5. Are spill kits easily accessible, protected from the weather, complete, and replenished if necessary?			

Corrective Actions Required:			
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ANNUAL INSPECTION CHECKLIST			
Date of Inspection:	Tank Name or No.:		
Date of Last Inspection:	Inspected by:	Signature:	
A. MONTHLY CHECKLIST	YES	NO	NOTES
1. Have monthly inspection checklists been completed?			
B. TANKS			
1. Are all alarms and automatic shutoff devices working properly?			
2. Is interstitial monitor functioning properly (if applicable)?			
C. OTHER			
1.			
Corrective Actions Required:			

APPENDIX D

TRAINING OUTLINE AND

TITLE 40 OF THE CODE OF FEDERAL REGULATIONS

PARTS 112.1 THROUGH 112.20 - OIL POLLUTION PREVENTION

(1 Page)

APPENDIX D

OUTLINE FOR SPILL PREVENTION, CONTROL, AND COUNTERMEASURES TRAINING

Training will be provided for facility personnel at the following times:

- System startup or whenever new equipment is installed
- Within the first week of employment for new personnel
- Annually

The training will include complete instruction in the elements of the facility's Spill Prevention, Control, and Countermeasures plan and will include the following:

- A. Pollution Control Laws, Rules, and Regulations Including a Summary of Title 40 of the Code of Federal Regulations Part 112, "Oil Pollution Prevention" (see Attachment)
- B. Fuel Storage
 1. Purpose and application of the following system elements:
 - a. Tanks
 - b. Piping
 - c. Pumps
 - d. Accessory equipment
 - e. Electronic monitors
 2. Operation, maintenance, and inspection of system elements
- C. Spill Prevention
 1. Potential spill sources
 2. Spill flow direction and impact on navigable waters
 3. Procedures to prevent spills, especially during fuel unloading
- D. Spill Control
 1. Secondary containment
 2. Safety valves
 3. Pump and equipment shutoff switches
 4. Use of catch basin inlet covers or other diversionary devices
- E. Spill Countermeasures
 1. Location and use of emergency phone numbers
 2. Location and use of fire extinguishers
 3. Location and use of spill cleanup kit
 4. Stopping the leak

ATTACHMENT

**TITLE 40 OF THE CODE OF FEDERAL REGULATIONS
PART 112 - OIL POLLUTION PREVENTION
Amendment, Federal Register July 17, 2002**

(21 Pages)

APPENDIX E
SPILL REPORTING FORM
(1 Page)

APPENDIX E

SPILL REPORTING FORM

1. GENERAL		
Name of Facility: National Weather Service Nashville WFO	Address: 500 Weather Station Road Old Hickory, TN 37138	
Completed By:	Organization: National Weather Service	
Position:	Phone:	
2. SPILL INFORMATION		
Date:	Time:	
Location at Facility:	Quantity:	
Substance Spilled:	Other:	
3. OUTSIDE NOTIFICATIONS		
Agencies	Recorder at Outside Agency	Date and Time
Call 9-1-1 (or the local emergency agency), if there is an immediate emergency. If "9" is required for an outside line, then call 9-9-1-1		
NWS/NOAA: Mike Jacob: (301) 713-1838, Ext. 165 Olga Kebis: (301) 713-1838, Ext. 173 Terry Brisbin: (817) 978-7777, Ext. 139 Mark George: (303) 497-3064, Ext. 263		
EPA NATIONAL RESPONSE CENTER or U.S. COAST GUARD: (800) 424-8802		
TDEC Spill Notification (24 hour): 1-888-891-8332		
4. INFORMATION ON SOURCE AND CAUSE		
5. DESCRIPTION OF ENVIRONMENTAL DAMAGE		
6. CLEANUP ACTION(S) TAKEN		
7. CORRECTIVE ACTION(S) TO PREVENT FUTURE SPILLS		

Note: All information must be filled in. If something is unknown, write "unknown."
Copies must be submitted to the NWS/NOAA personnel listed above.

APPENDIX F

**CROSS REFERENCE OF THE REQUIREMENTS OF
TITLE 40 OF THE CODE OF FEDERAL REGULATIONS,
PARTS 112.7 AND 112.8, WITH THIS PLAN
(1 Page)**

APPENDIX F

CROSS REFERENCE OF THE REQUIREMENTS OF 40 CFR 112.7 AND 112.8 WITH THIS PLAN

CFR Citation	Item	Plan Location
112.7(b)	Potential Spill Prediction, Volumes, and Rates	Part I.B.5 and Table 2
112.7(c)	Containment and Diversionary Structures	Part I.B.2 and Part II.B.2
112.7(d)	Secondary Containment Impracticability	Not Applicable
112.7(e)	Inspections and Record Keeping	Part II.A.3
112.7(f)	Training	See Subparts
112.7(f)(1)	Personnel Instructions	Part II.A.5 & Appendix D
112.7(f)(2)	Designated Person Responsible for Spill Prevention	Page i
112.7(f)(3)	Spill Prevention Briefings	Part IV.B.2
112.7(g)	Security	See Subparts
112.7(g)(1)	Fencing	Part II.A.4
112.7(g)(2)	Flow Valves Locked	Not Applicable
112.7(g)(3)	Starter Controls Locked	Not Applicable
112.7(g)(4)	Pipeline Loading and Unloading Connections Securely Capped	Not Applicable
112.7(g)(5)	Lighting Adequate to Detect Spills	Part II.A.4
112.7(h)	Facility Truck Unloading Operations	Part II.A.2
112.7(i)	Container Evaluation after Repair	Page ii, Part II.B.3
112.8(b)	Drainage Control	Part I.B.3
112.8(c)	Bulk Storage Tanks and Secondary Containment	See Subparts
112.8(c)(1)	Tank Compatibility with Its Contents	Part II.A.1
112.8(c)(2)	Diked Area Construction and Containment for Storage Tanks	Not Applicable
112.8(c)(3)	Diked Area Inspection and Drainage of Rainwater	Not Applicable
112.8(c)(4)	Corrosion Protection of Buried Metallic Storage Tanks	Not Applicable
112.8(c)(5)	Corrosion Protection of Partially Buried Metallic Tanks	Not Applicable
112.8(c)(6)	Aboveground Tank Periodic Integrity Testing	Part IV.B.1
112.8(c)(7)	Control of Leakage through Internal Heating Coils	Not Applicable
112.8(c)(8)	Tank Installation Fail-safe Engineered	Part II.A.1, B.1
112.8(c)(9)	Observation of Disposal Facilities for Effluent Discharge	Not Applicable
112.8(c)(10)	Visible Oil Leak Corrections from Tank Seams and Gaskets	Part II.A.3 & Appendix C
112.8(c)(11)	Appropriate Position of Mobile or Portable Tanks	Not Applicable
112.8(d)	Facility Transfer Operations	See Subparts
112.8(d)(1)	Buried Piping Installation Protection and Examination	Part II.A.1 & Appendix C
112.8(d)(2)	Not-in-service and Standby Terminal Connections	Not Applicable
112.8(d)(3)	Pipe Support Designs	Not Applicable
112.8(d)(4)	Aboveground Valve and Pipeline Examination	Not Applicable
112.8(d)(5)	Aboveground Piping Protection from Vehicular Traffic	Not Applicable

Note: CFR Code of Federal Regulations